



**HOUSTON HEALTH**  
DEPARTMENT

**Office of Surveillance & Public Health Preparedness**  
*Program of Public Health Informatics*

**Influenza Surveillance Weekly Report**  
CDC MMWR Week 41: October 11—17, 2015

**Influenza Activity by County, State, and National Levels**

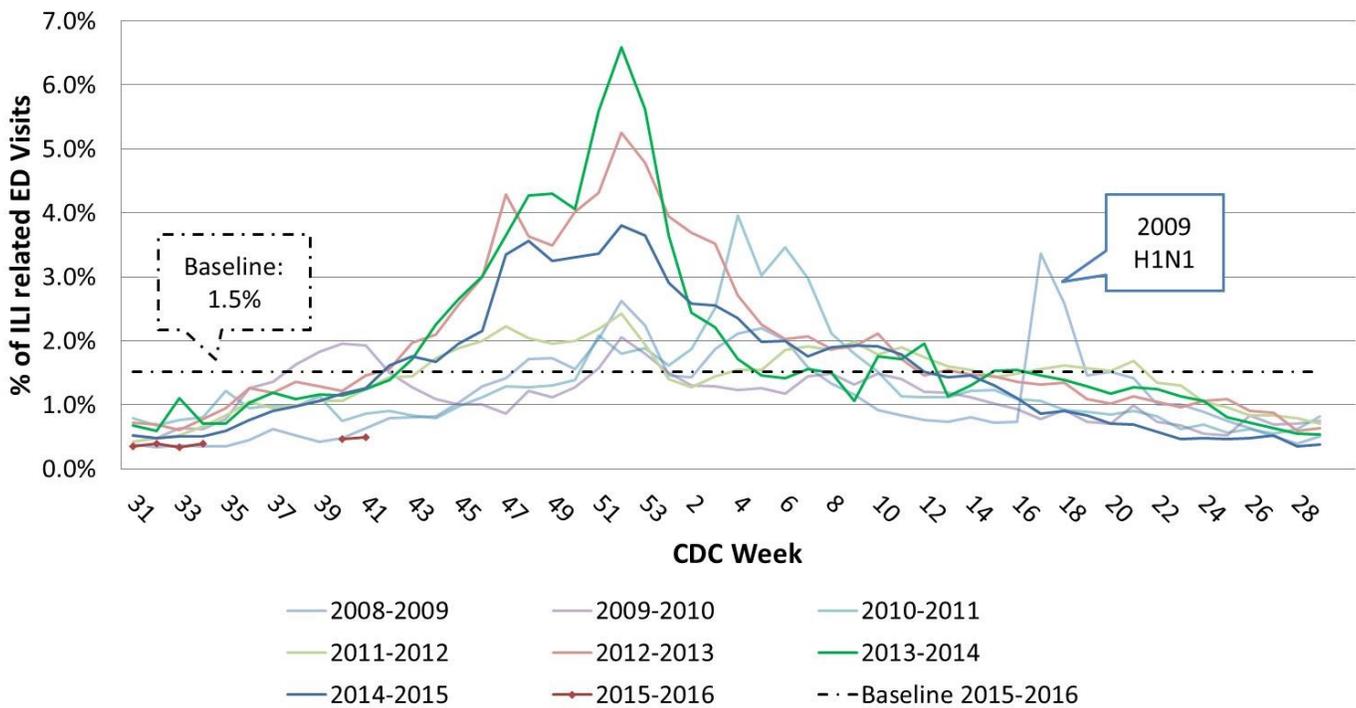
Houston/ Harris County: Week 41	Texas: Week 41	CDC: Week 41
Low	Low	Low

**Highlights**

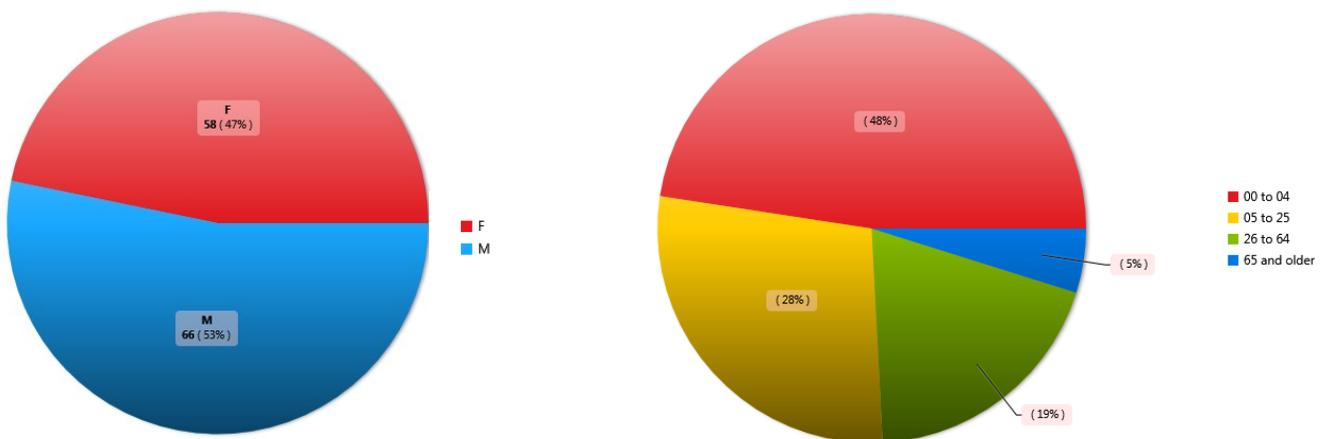
- The Houston Health Department (HHD) conducts seasonal influenza surveillance from October (Week 40) 2015 to May (Week 22) 2016.
- The percentage of reported influenza-like illness (ILI) detected from emergency departments in Houston/Harris County **did not change** from 0.5% in Week 40 to 0.5% in Week 41. The proportion of ILI was below the baseline of 1.5%.
- The percentage of flu test positives from sentinel providers in Houston **did not change** from 0% in Week 40 to 0% in Week 41. The percent of flu positives from clinical laboratories was 4% in Week 41.
- During the 2015-2016 influenza season, zero (0) Houston influenza-associated pediatric deaths have been reported.
- In Week 41, 10 surveillance specimens were tested by the City of Houston Bureau of Laboratory Services. The following types and number of viruses were detected in these specimens:  
**Influenza A H3 (0), Influenza A H1N1 (0), Influenza B (0).**
- HHD receives electronic lab reports from clinical labs. In Week 41, the percent of flu positives labs was 4% which is an **increase** from 2% in Week 40.
- At the national level during Week 41, 1.7 % of specimens tested and reported by clinical laboratories to the CDC were positive for influenza and 4.3% of specimens tested and reported by public health laboratories to CDC were positive for influenza. The proportion of outpatient visits for ILI (1.4%) was **below** the national baseline 2.1% and the proportion of deaths attributed to pneumonia and influenza 5.7% was **below** the epidemic threshold of 6.0%.

Syndromic Surveillance: 2015-2016 Influenza Season

Comparison of ILI-Related ED Visits in Houston/Harris County



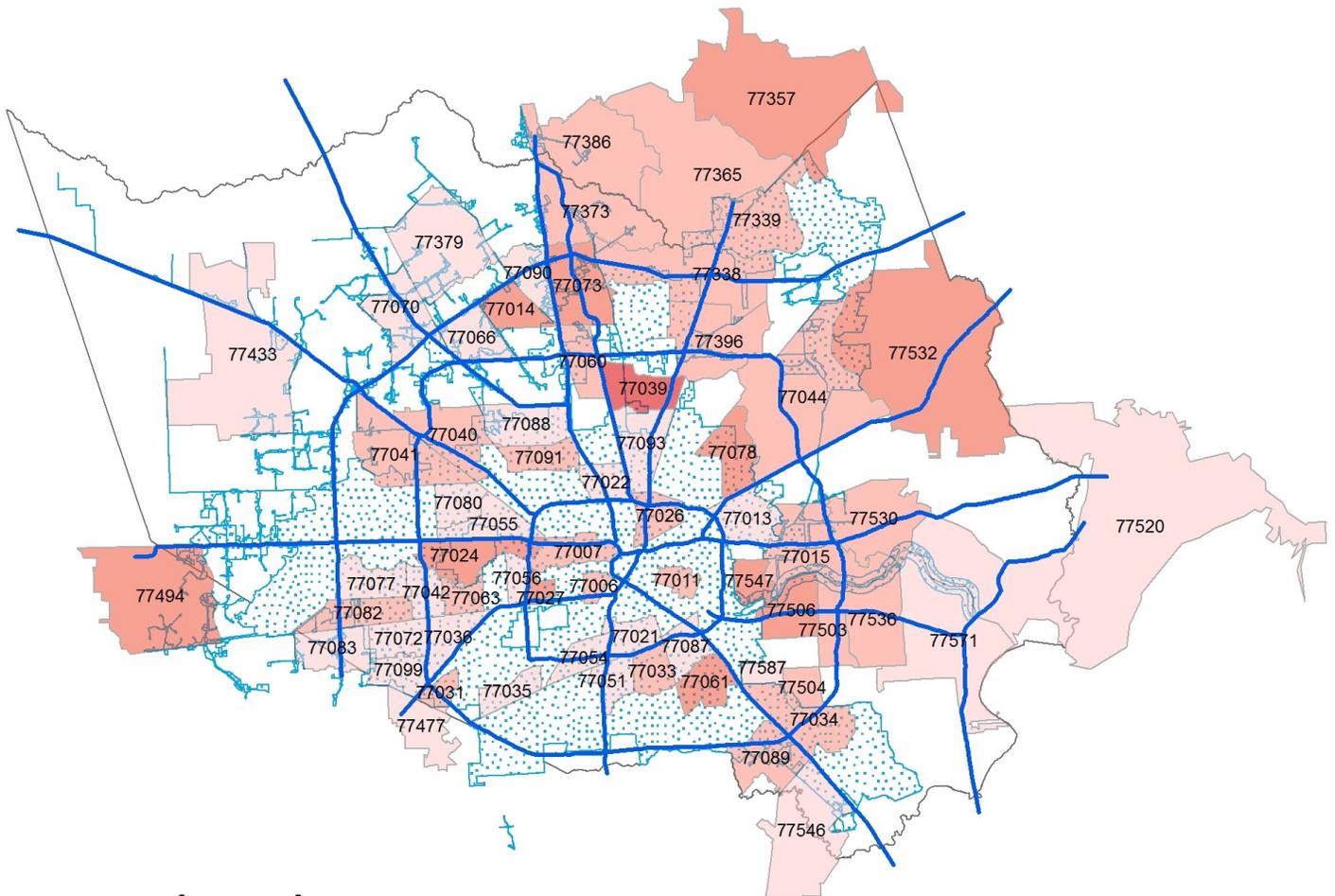
Syndromic Surveillance: 2015-2016 Influenza Season Age and Gender Distribution



In Week 41, 0.5% of emergency department (ED) visits were due to influenza-like illness (ILI) complaints. Of the 124 patients presenting with ILI, the age group that recorded the most ED visits was the 00 to 04 year olds (48%). Males accounted for 53% of patients presenting with ILI.

NOTE: Houston/Harris County ILI activity is assessed using information provided by surveillance participants in the Real-time Outbreak Disease Surveillance System (RODS). For Week 41, 36 surveillance participants reported ILI information to Houston Health Department. Influenza-like illness (ILI) is defined as the mention of fever AND cough, OR fever AND sore throat, OR flu in the patient's ED chief complaint. These data do not represent laboratory confirmed cases of influenza nor do they represent all ED visits in Houston/Harris County.

Syndromic Surveillance: Geographic Distribution Map



During Week 41, there were no ZIP codes with 6.0% or greater percentage of ED visits related to ILI.

**Legend**

— Highway

**ILI Percent**

0.1% - 1.1%

1.2% - 2.5%

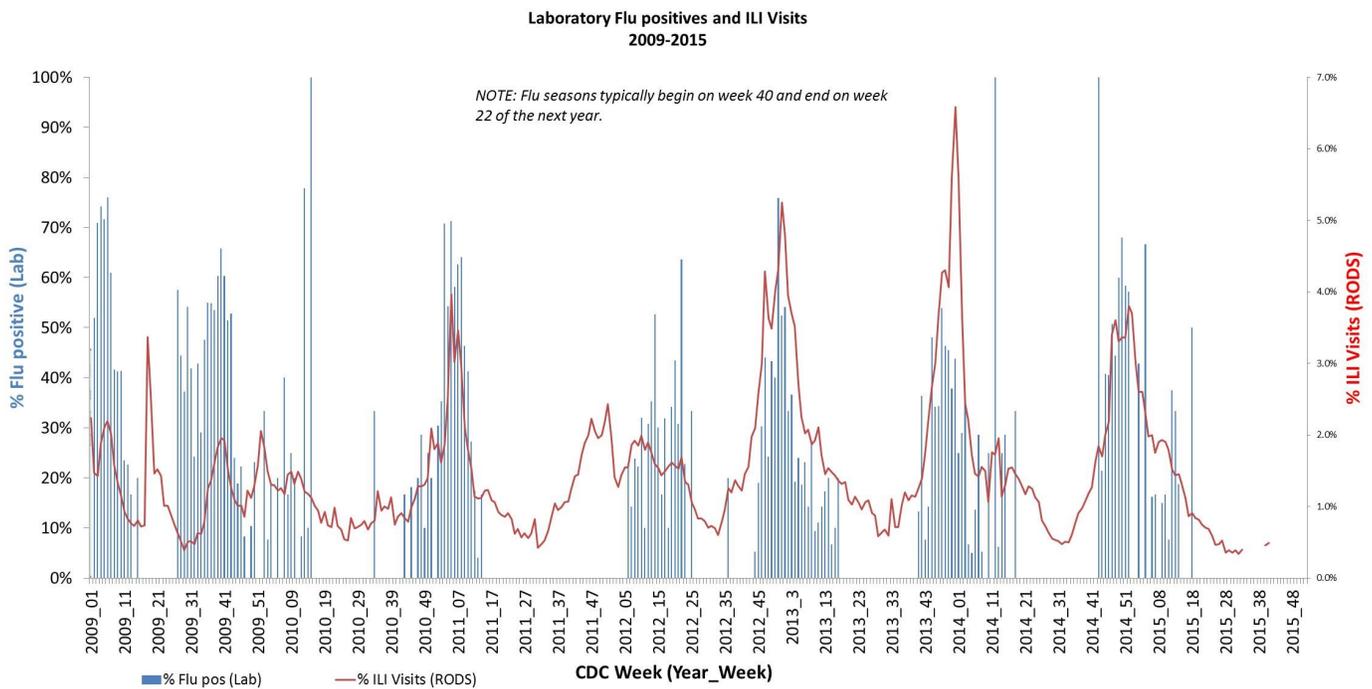
2.6% - 4.0%

4.1% - 6.0%

City of Houston City Limits

*NOTE: Houston/Harris County ILI distribution map was created using data provided by 36 hospitals that voluntarily provide data based on chief complaints in the Real-time Outbreak Disease Surveillance System (RODS). This map reflects the percentage of ILI cases from each zip code from the total amount of cases seen in each zip code during the current week of reporting. Influenza-like illness (ILI) is defined as the mention of fever AND cough, OR fever AND sore throat, OR flu in the patient's ED chief complaint. These data do not represent laboratory confirmed cases of influenza nor do they represent all ED visits in Houston/Harris County.*

Laboratory Surveillance: Influenza Rapid Test Results, Houston

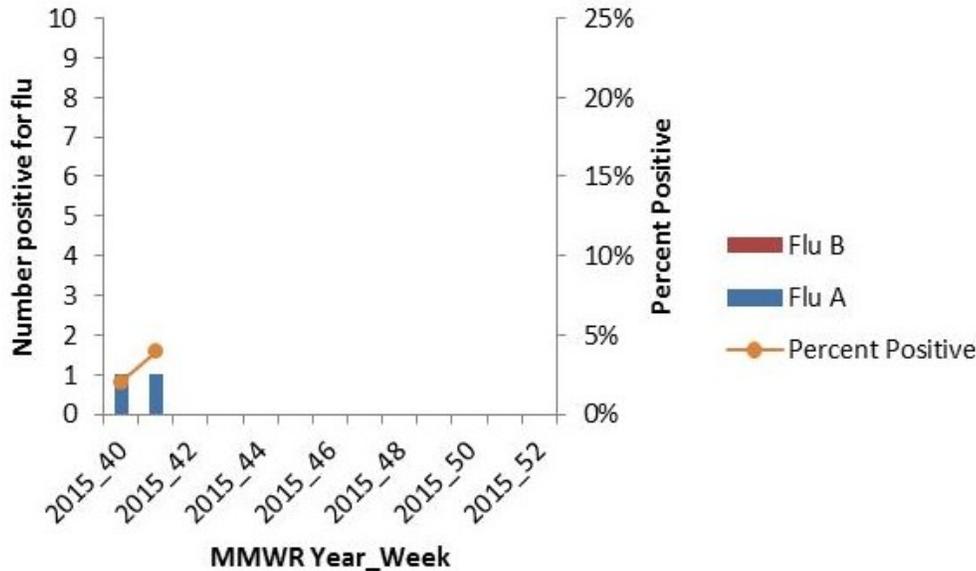


CDC Week Number	39 (Sep 27–Oct 03)	40 (Oct 04–10)	41 (Oct 11–17)
# of Influenza Tests Performed	13	22	10
% Influenza Positive	0%	0%	0%
# Influenza A Positive	0	0	0
% Influenza A Positive	0%	0%	0%
# Influenza B Positive	0	0	0
% Influenza B Positive	0%	0%	0%
# Non-differentiated Positive	0	0	0
% Non-differentiated Positive	0%	0%	0%



## Passive Virologic Surveillance

HHD receives electronic lab reports from clinical laboratories. In week 41, there were (01) additional laboratory confirmed influenza cases from the prior week. The percent of flu positives was 4%. The flu positive was in age group 25 to 64 years.



## School Surveillance

Table 1: ILI and Influenza Cases by Type and School Type<sup>1</sup> per Month

	Total Cases	Lab Confirmed		Flu A	Flu B	A+B	Unclassified		Elem Schools	Middle Schools	High Schools	Multi-Level Schools
		#	%									
Aug	-	-	-	-	-	-	-	-	-	-	-	-
Sep	03	01	33%				01		01	01	01	00
Oct												
Nov												
Dec												
Jan												
Feb												
Mar												
Apr												
<b>Total</b>	03	01	33%	00	00	00	01		01	01	01	00

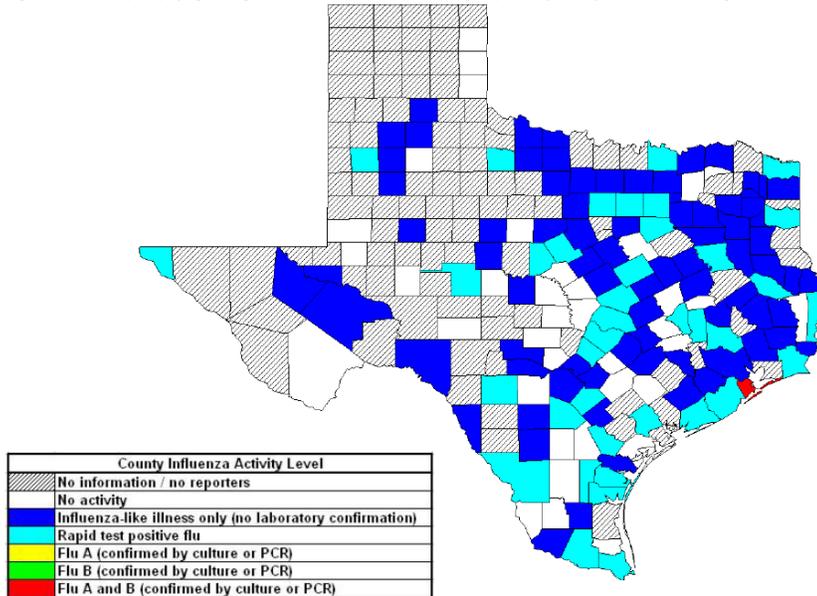
September was the first full month of the 2015-2016 school year. In September there were three (3) ILI cases in HISD students. There was one (1) laboratory confirmed flu cases seen in September. Subtype information was not available for the lab confirmed case.

NOTE: Data on student ILI and influenza cases is collected from 306 schools within Houston Independent School District. <sup>1</sup>School will be counted more than once if more than one case from the same school is reported during the

## Texas and National Influenza and ILI Activity

### Statewide Influenza Activity Map

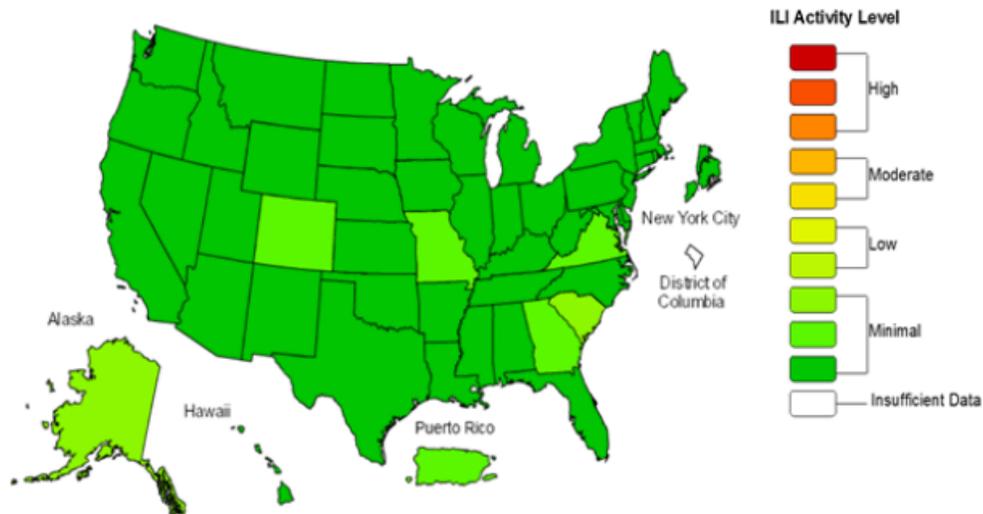
Figure 4: Texas Map Displaying the Highest Level of Influenza or ILI Activity Reported by County for the Week Ending Oct. 17, 2015 (MMWR Week 41)



Please note: The majority of influenza cases are not reportable by law in Texas. This map contains data from sentinel sites and only displays influenza and ILI cases that were reported to public health. Positive laboratory results are reported according to specimen collection date, or date received in the laboratory if the former is unknown.

**NOTE:** Influenza activity level corresponds to current MMWR week only and does not reflect previous weeks' activity. The majority of influenza cases are not reportable by law to the Texas Department of State Health Services. This map contains data from sentinel sites and does not represent all influenza cases in the state. Positive laboratory results are reported according to specimen collection date or date received in the lab if the former is unknown.  
<http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/2015/>

### Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet 2015-16 Influenza Season Week 41 ending Oct 17, 2015



**NOTE:** Data collected in ILINet are used to produce a measure of ILI activity by state. Activity levels are based on the percent of outpatient visits in a state due to ILI and are compared to the average percent of ILI visits that occur during spring and fall weeks with little or no influenza virus circulation. This map uses the proportion of outpatient visits to health care providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels. Data collected in ILINet may disproportionately represent certain populations within a state, and therefore, may not accurately depict the full picture of influenza activity for the whole state. <http://www.cdc.gov/flu/weekly/>

*The Houston Influenza Surveillance Weekly Report* is available on the Houston Health Department web site at:

<http://www.houstontx.gov/health/weekly-flu-report>

**NOTE:**

*Influenza-like Illness (ILI) is defined as fever (temperature  $\geq 100^{\circ}\text{F}$ ) plus a cough OR a sore throat, in the absence of a known cause other than influenza.*

*Houston ILI baselines were determined using the same method as the Centers for Disease Control and Prevention Regional ILI baselines. The baseline is developed by calculating the mean percentage ILI of ED visits during non-influenza weeks for the previous three seasons and adding two standard deviations. A non-influenza week is defined as periods of two or more consecutive weeks in which each week accounted for less than 2% of the season's total number of specimens that tested positive for influenza.*

*Additional information regarding Houston, Texas and national ILI activity can be accessed at:*

<http://www.houstontx.gov/health/>

<http://http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/2015/>

<http://www.cdc.gov/flu/weekly/>

<http://www.who.int/csr/don/en/>

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